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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/780,830	02/18/2004	Neal S. Bergano	Bergano 20-CIP4	3768				
80635 TCM/GTTP 55 South Commercial Street Manchester, NH 03101	7550 04/09/2009		<table border="1"><tr><td>EXAMINER</td></tr><tr><td>WANG, QUAN ZHEN</td></tr></table>		EXAMINER	WANG, QUAN ZHEN		
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			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2613</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	2613		
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			<table border="1"><tr><td>NOTIFICATION DATE</td><td>DELIVERY MODE</td></tr><tr><td>04/09/2009</td><td>ELECTRONIC</td></tr></table>	NOTIFICATION DATE	DELIVERY MODE	04/09/2009	ELECTRONIC	
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04/09/2009	ELECTRONIC							

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@gtpp.com  
jhobbs@gtpp.com  
laura.fish@tycotelecom.com

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/780,830

**Applicant(s)**

BERGANO, NEAL S.

**Examiner**

QUAN-ZHEN WANG

**Art Unit**

2613

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 02 April 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1-7,9-18,20-27,37-39,41-44,46-50,56-62,64-66,68-72,74-80,82-86 and 88-98  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13. ☐ Other: \_\_\_\_\_.

/Quan-Zhen Wang/  
Primary Examiner, Art Unit 2613

Continuation of 11, does NOT place the application in condition for allowance because:

Applicant's arguments filed on 4/2/2009 have been fully considered but they are not persuasive.

Applicant argues, "Joyce does not even remotely teach or suggest to adjust the depth of a periodic modulation imparted on a data modulated signal at the data modulation frequency, as recited independent claims 1 and 56. Joyce involves modulating a single laser with many multiplexed electrical video data signals, and none of the data signals are periodic (i.e. electrical signals are modulated with the video data which is understood to be non-periodic). There is simply nothing in Joyce that teaches to adjust the depth of a periodic modulation of the intensity of an optical signal." However, Joyce specifically teaches, "The optical link alone was tested with optical modulation depth of 21%, 29%, and 37%" (see Section III Results on page 1064). There is no doubt that Joyce does teach adjusting optical modulation depths.

Applicant argues, "In Joyce many video data signals are subcarrier multiplexed in the electrical domain and the multiplexed electrical signal modulates a single (only one) DFB laser. See FIG. 1 and page 1063, left column, section entitled "Experiment. The OMD referenced in Joyce is the equivalent modulation index of the group of subcarrier multiplexed video data channels. See page 1063 right column, first full paragraph. Clearly, Joyce is describing varying the equivalent modulation index of a group of multiplexed electrical data signals used to modulate a single laser." However, please note, "USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997)" (MPEP §2106, emphasis added). For the instant case, Sano discloses an apparatus comprising: an optical signal source (fig. 1, DBR-LD) configured to generate an optical signal; a data modulator (fig. 1, the second intensity modulator) coupled to said optical signal source and configured to modulate data on said optical signal at a data modulation frequency; and an amplitude modulator (fig. 1, the first intensity modulator) coupled to said optical signal source and configured to provide a periodic modulation of the intensity of said optical signal at said data modulation frequency. The only difference is that Sano does not specifically disclose selectively adjusting a depth of said periodic modulation of the intensity of said optical signal." However, testing an optical communication system with different modulation depths is well known in the art, as it is explicitly disclosed by Joyce. Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to configure the intensity modulation of Sano to adjust the modulation depth, as it is disclosed by Joyce. One of ordinary skill in the art would have been motivated to do so in order to optimize the performance of the optical communication system.

In addition, "It is common sense that familiar items may have obvious uses beyond their primary purposes, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle." See KSR, 137 S. Ct. at 1742, 82 USPQ2d at 1397. For the instant case, even though the adjusting of optical modulation depths of Joyce is for a hybrid-fiber/coax system operated with a combination of different subcarriers, the concept of adjusting optical modulation depths is applicable to other optical communication systems to one of ordinary skill in the art.

For the above reasons, the rejection of claim 1 still stands. For the same reason, the rejections of claims 2-7, 9-18, 20-27, 37-39, 41-44, 46-50, 56-62, 64-66, 68-72, 74-80, 82-86 and 88-96 still stand.